

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Original): An antenna for transmitting a radio frequency signal, comprising:

a first electrically conductive sheet;
a second electrically conductive sheet spaced a first distance apart from said first metallic sheet; and
an axially extending leg electrically connected to said first electrically conductive sheet and said second electrically conductive sheet, said axially extending leg being electrically conductive.

Claim 2 (Original): An antenna as claimed in claim 1, wherein said first electrically conductive sheet, said second electrically conductive sheet, and said axially extending leg are made of metal.

Claim 3 (Original): An antenna as claimed in claim 1, wherein said first electrically conductive sheet, said second electrically conductive sheet, and said axially extending member are made from a unitary sheet of metal.

Claim 4 (Original): An antenna as claimed in claim 1, wherein said first electrically conductive sheet has a first arcuate-shaped outer edge and said second electrically conductive sheet has a second arcuate-shaped outer edge wherein said axially extending member extends from said first arcuate-shaped outer edge to said second arcuate-shaped outer edge.

Claim 5 (Original): An antenna as claimed in claim 4, wherein said first arcuate-shaped outer edge has a first radius extending from a first center point and said second arcuate-shaped outer edge has a second radius extending from a second center point.

Claim 6 (Original): An antenna as claimed in claim 5, wherein the first center point and the second center point are contained on a centerline, and said first electrically conductive sheet and said second electrically conductive sheet are contained in a first plane and a second plane wherein the first plane is parallel to the second plane and the centerline is normal to the first plane and the second plane.

Claim 7 (Original): An antenna as claimed in claim 6, wherein said first electrically conductive sheet has a first surface area and said second electrically conductive sheet has a second surface area, wherein said first surface area is greater than the second surface area.

Claim 8 (Original): An antenna as claimed in claim 7, wherein said first electrically conductive sheet and said second electrically conductive sheet include cut-out sections.

Claim 9 (Original): An antenna as claimed in claim 1, further comprising a cable electrically coupled to said first electrically conductive sheet and said second electrically conductive sheet.

Claim 10 (Original): An antenna as claimed in claim 9, wherein said cable is coaxial cable.

Claim 11 (Original): An antenna as claimed in claim 1, wherein said first electrically conductive sheet is spaced apart a distance from said second electrically conductive sheet and is approximately equal to or a multiple of a wavelength distance of the frequency transmitted from said antenna.

Claim 12 (Original): An antenna as claimed in claim 11, wherein said axially extending leg has a length equal to the spaced apart distance.

Claim 13 (Original): An antenna as claimed in claim 1, further comprising a metallic cup electrically coupled to said first electrically conductive sheet.

Claim 14 (Original): An antenna as claimed in claim 13, wherein said cup includes an opened top structure having a cylindrically-shaped sidewall attached to a bottom wall.

Claim 15 (Original): An antenna as claimed in claim 14, wherein a portion of said bottom wall slopes away from the open top portion toward a central axial axis passing through said cup.

Claim 16 (Original): An antenna as claimed in claim 15, wherein said portion of said bottom wall is frusta-conical in shape.

Claim 17 (Original): An antenna as claimed in claim 16, wherein said bottom wall further includes a central flat portion connected to an end of the frusta-conical shaped portion.

Claim 18 (Original): An antenna as claimed in claim 17, wherein said central flat portion is circular in shape.

Claim 19 (Original): An antenna as claimed in claim 14, wherein said first electrically conductive sheet comprises a tab extending therefrom contacting said cup.

Claim 20 (Original): An antenna as claimed in claim 14, wherein said first electrically conductive sheet is spaced a second distance from said bottom wall.

Claim 21 (Original): An antenna as claimed in claim 20, wherein the second distance is approximately equal to or a multiple of a wavelength distance of the frequency to be transmitted from the antenna.

Claim 22 (Original): An antenna as claimed in claim 1, further comprising a mechanical register at least partially received between said first conductive sheet and said second conductive sheet.

Claim 23 (Original): An antenna as claimed in claim 1, further comprising an electrical frequency generator electrically coupled to said first electrically conductive sheet.

Claim 24 (Original): An antenna as claimed in claim 23, wherein said frequency generator is electrically coupled to a coaxial cable which is electrically coupled to said first electrically conductive sheet.

Claim 25 (Original): An antenna as claimed in claim 23, further comprising a power source electrically coupled to said frequency generator.

Claim 26 (Original): An antenna as claimed in claim 25, wherein said power source is a battery.

Claim 27 (Original): An antenna as claimed in claim 23, further comprising a circuit board that includes said frequency generator, said circuit board attached to said first electrically conductive sheet.

Claim 28 (Original): An antenna as claimed in claim 13, further comprising a metallic meter case, said metallic cup received within said metallic meter case.

Claims 29-47 (Canceled)

Claim 48 (Original): A method for measuring a utility, comprising the following steps:

- providing a meter;
- providing a meter register;
- transmitting a signal from a meter register, said signal identifying said meter-type identification code, and utility consumption; and
- receiving said information by a central authority.

Claim 49 (Original): A method as claimed in claim 48, further comprising the step of transmitting information if said meter has been tampered with.

Claim 50 (Original): A method as claimed in claim 49, wherein said tampering comprises subjecting said meter register to a magnetic field above a threshold value.

Claim 51 (Original): A method as claimed in claim 48, wherein said meter is a fluid meter, said method further comprising the step of determining reverse flow through said meter and transmitting such information.

Claim 52 (Original): A method as claimed in claim 48, wherein said signal includes information corresponding to an odometer reading on said meter.

Claim 53 (Original): A method as claimed in claim 48, wherein said meter is adapted to receive signals from an external source.

Claim 54 (Original): A method as claimed in claim 53, further comprising the step of transmitting a signal from an external source to adjust the transmitting signal odometer reading.

Claim 55 (Original): A method as claimed in claim 48, further comprising the step of providing a database containing the received information by the central authority.

Claim 56 (Original): A method as claimed in claim 55, wherein said database is accessible by a third party.

Claim 57 (Original): A method as claimed in claim 56, wherein said third party is an end user which is responsible for the meter.

Claim 58 (Original): A method as claimed in claim 57, wherein said database is internet accessible.

Claim 59 (Original): A method as claimed in claim 48, wherein said meter transmits a signal if there is a utility leak and said method further comprising the step of notifying a third party to report a leak.

Claim 60 (Original): A method as claimed in claim 59, wherein said notification occurs either via an alarm or a signal sent to a phone or a pager.

Claim 61 (Original): A method as claimed in claim 48, wherein said signal is received by a receiver mounted on a vehicle.

Claim 62 (Original): A method as claimed in claim 48, further comprising the step of providing shut-off means in a fluid line which is fluidly coupled to said meter and opening and closing said valve depending on the amount of fluid measured by said meter.

Claims 63-65 (Canceled)